



Ogallala Ground Water Contamination Site

Ogallala, Nebraska

Site Description

The Ogallala Ground Water Contamination Site consists of an aquifer contaminated with industrial chemicals, primarily chlorinated volatile organics. Contamination was discovered in 1989 when the Nebraska Department of Health sampled the Ogallala public water supply system during routine sampling. Contamination was present in five of the town's nine water supply wells. Under a state of Nebraska Administrative Order, the city of Ogallala installed a new well field in 1993. Depth to ground water at the site ranges from nine to 17 feet below ground surface. The Ogallala Ground Water contamination site consists of two project areas, called operable units. Operable Unit 1 (OU 1) consists of several properties or locations which have been contaminated by chlorinated solvents. Operable Unit 2 (OU 2) is identified as the perchloroethylene (PCE) contamination migrating from a dry cleaner in the area.

Current Site Status and Cleanup Actions to Date

- EPA completed all construction activities for OU 1. The remedy for OU 1 includes continued use of an [extraction and treatment system](#) (2pp, 526K) institutional controls, and [monitored natural attenuation](#) (2pp, 91K).
- EPA conducted two ground water treatability studies at OU 2. The first study used reductive dechlorination and was completed in December 2000; the second study used [chemical oxidation](#) (2pp, 172K) technologies and it was initiated in December 2001 and completed in April 2002.
- EPA completed two emergency actions to address the source of contamination at OU 2. The first action used [soil vapor extraction](#) (2pp, 80K) (SVE) to treat the soils above the groundwater. The second action addressed the source area in the ground water and utilized in-situ chemical oxidation.
- The cleanup plan issued in February 2006 selected in-situ chemical oxidation as the remedy for OU 2.
- In April 2006, EPA sampled the existing ground water monitoring wells at OU 2, performed a pre-design field study to verify the location of PCE, installed four additional monitoring wells, and completed the design for the in-situ chemical oxidation.
- EPA entered into a State Superfund Contract with the Nebraska Department of Environmental Quality (NDEQ) in July 2006, to ensure that the appropriate cleanup actions for the site are implemented.
- The first injection is complete and the preliminary close out report for construction completion was signed and submitted to EPA Headquarters in September 2006.

Current Funding Status

- Between 1991 and 2006 EPA obligated approximately \$3 million to the site to study the nature and extent of contamination, two emergency

Key

Accomplishments

- All construction activities for OU 1 have been completed.
- The ROD for OU 2 was issued in February 2006 and selected in-situ [chemical oxidation](#) as the remedy.
- All construction activities for OU 2 have been completed.

For more information on the projects at this site, please read the [Ogallala Ground Water Contamination Site Fact Sheet](#) (5pp, 17K) on the Region 7 Superfund Web site.



actions, the design of the cleanup, and implementation of chemical oxidation and monitoring actions.

- In 2006, approximately \$232,000 was obligated for new construction, and \$152,000 was obligated to design the remedy.